

Amendments to the Claims

The following claims are intended to replace all prior versions and listings of the claims in this application:

1-5. (Cancelled)

6. (Currently Amended) A method polymeric antimicrobial composition according to claim 5 49 wherein the polyol comprises a polyalkylene glycol.

7. (Currently Amended) A method polymeric antimicrobial composition according to claim 5 49 wherein the polyol comprises a polyethylene glycol.

8. (Cancelled)

9. (Currently Amended) A method polymeric antimicrobial composition according to claim 5 49 wherein the polyol is a polyethylene glycol of molecular weight in the range of from 200 to 1000.

10. (Currently Amended) A method according to polymeric antimicrobial composition for treating or preventing gastrointestinal disease in animals by gastrointestinal administration, said antimicrobial composition comprising the polymeric antimicrobial composition of claim 48 and 49 wherein the polymeric antimicrobial is present in a composition that further comprises a pharmaceutically or veterinarily acceptable inert carrier for gastrointestinal administration to animals.

11. (Currently Amended) A method polymeric antimicrobial composition according to claim 10 wherein the carrier for gastrointestinal administration is selected from the group consisting of controlled release polymers, olive oil, peanut oil, sesame oil, sunflower oil, arachis oil, coconut oil, liquid paraffin, ethylene glycol, propylene glycol, polyethylene glycol, ethanol, propanol, isopropanol, glycerol, fatty alcohols, triglycerides, polyvinyl alcohol, partially hydrolysed polyvinylacetate and mixtures thereof.

12. (Currently Amended) A method polymeric antimicrobial composition according to claim 10 wherein the composition is in the form of a feed additive or drinking water additive comprising from 0.1 to 70% by weight of the polymeric antimicrobial.

13. (Currently Amended) A method according to claim 49 wherein the polymeric antimicrobial is administered in the form of a composition comprising drinking water composition comprising water and an antimicrobially effective amount of the a polymeric antimicrobial diluted with water composition according to claim 48.

14. (Cancelled)

15. (Currently Amended) A method according to claim 49 wherein the polymeric antimicrobial is administered as a drinking A drinking water composition according to claim 13 containing in the range of from 0.0001 to 10% by weight of the polymeric antimicrobial composition.

16. (Currently Amended) A method polymeric antimicrobial composition according to claim 49 48 comprising a further active agent that is a further administering a chemotherapeutic agent.

17. (Currently Amended) A method polymeric antimicrobial composition according to claim 49 48 comprising a further active agent that is further administering an antimicrobial.

18-24. (Cancelled)

25. (Currently Amended) A method according to claim 49 24 wherein the polymeric antimicrobial ~~composition~~ is orally administered.

26. (Currently Amended) A method according to claim 49 24 wherein the animal is suffering from at least one gastrointestinal disease selected from the group consisting of gastroenteritis, ulcer, diarrhoea, dysentery, and insufficient weight gain.

27. (Currently Amended) A method according to claim 49 24 wherein the animal is suffering from at least one of diarrhoea, gastroenteritis, and dysentery.

28. (Currently Amended) A method according to claim 49 24 wherein the animal is selected from the group consisting of dogs, pigs, sheep, horses, cattle, cats, poultry, ducks, turkeys and quail.

29. (Currently Amended) A method according to claim 49 24 wherein the animal is selected from ruminant animals and the antimicrobial is rectally administered.

30. (Currently Amended) A method according to claim 49 24 wherein the animal is selected from poultry and pigs.

31. (Currently Amended) A method according to claim 49 30 wherein the animal is a partially grown pig.

32. (Currently Amended) A method according to claim 49 used for treatment or prophylaxis of porcine post weaning coliobacillosis wherein said administering comprises comprising orally administering an antimicrobially effective amount of the polymeric antimicrobial to young pigs after weaning, an antimicrobially effective amount of a polymeric antimicrobial composition of claim 48.

33. (Currently Amended) A method according to claim 49 24 wherein the polymeric antimicrobial ~~composition~~ is administered at a dose of from 0.05 to 5000 mg/kg/day.

34. (Currently Amended) A method according to claim 49 24 wherein the polymeric antimicrobial ~~composition~~ is administrated at a dose in the range of from 0.5 to 500 mg/kg/day.

35. (Currently Amended) A method according to claim 32 wherein the young pigs are administered a dose of the polymeric antimicrobial ~~composition~~ in the range of from 0.05 to 50 mg/kg/day.

36. (Currently Amended) A method according to claim 49 24 wherein the gastrointestinal disease results from one or more microbes selected from the group consisting of Coliforms, *Salmonella*, *P.aeruginosa*, *Helicobacter*, *Proteus*, Enterobacteria, Yeasts, Protozoa, Clostridia and *Shigella*.

37. (Currently Amended) A method according to claim 49 24 wherein the gastrointestinal disease results from one or more of *H. pylori* and Coccidia.

38. (Currently Amended) A method according to claim 49 24 wherein the gastrointestinal disease results from at least one of enterotoxigenic *E. coli* and β-haemolytic *E. coli*.

39. (Currently Amended) A method according to claim 49 used in ~~of~~ treatment or prevention of necrotic enteritis in poultry comprising administering to poultry an antimicrobially effective amount of the ~~a~~-polymeric antimicrobial ~~composition of~~ ~~claim 48.~~

40-41 (Cancelled)

42. (Currently Amended) A method according to claim 49 used in ~~of~~ treatment or prevention of coccidiosis in poultry comprising administering to poultry an antimicrobiially effective amount of the ~~a~~-polymeric antimicrobial ~~composition of~~ ~~claim 48.~~

43-45. (Cancelled)

46. (Currently Amended) A method according to claim 49 wherein the ~~polymeric antimicrobial is administered in an~~ ~~An~~ animal feed composition comprising a feed material and an antimicrobiially effective amount of the ~~a~~-polymeric antimicrobial ~~composition according to~~ ~~claim 48.~~

47. (Currently Amended) A method ~~An animal feed composition~~ according to claim 46 wherein the polymeric antimicrobial ~~composition~~ is present in an amount of from 0.001 to 25% by weight of the total feed composition.

48. (Cancelled)

49. (New) A method for treatment or prevention of gastrointestinal disease in an animal subject comprising:

administering to an animal subject a polymeric antimicrobial manufactured by a process comprising heating poly(2-propenal, 2-propenoic acid) in a polyol at a temperature in the range from 40°C to 150°C for a time sufficient to increase the antimicrobial activity of the poly(2-propenal, 2-propenoic acid) and wherein the poly(2-propenal, 2-propenoic acid) is fixed from a homopolymer of acrolein by ionic derivation and oxidation.